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TV Audience Measurement in Europe: Do Advertisers Really Know What They are Paying for?

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Abstract
The paper aims at exploring the models of organization of TV audience measurement systems and applied methodologies with regard to transparency, reliability and overall usefulness in media planning. TV audience measurement has a long tradition in Europe. Broadcasters and advertisers (and advertising/media buying agencies) have always been interested in capturing viewership of TV programs. Both have been using the measured data in decision making, the former for the purpose of program scheduling and air-time sales and the latter for choosing the right media outlets and TV programs for their advertising campaigns. TV rating as a percentage of homes watching a particular TV program have been coined as generally accepted "currency" used in air-time sales. This measure has also been used to calculate GRPs (total rating points achieved in a defined period of time) while shaping media plans and evaluating the effects of advertising campaigns. While it seems that the underlying logic is quite sound and the measured data may be used for evidence-based decision making, one may still question its usefulness in regard to the applied methodologies as well as the overall transparency and reliability of the model of organization of an audience measurement system (AMS). Three models of organization of AMS have been applied in Europe, including own service (OS), media owned company (MOC) and joint industry committee (JIC). The paper discusses advantages and disadvantages of the named models, while focusing on the panel sizes, research methods and defined universe resulting from different models of organization of AMS. Based on two case study analyses (the Czech Republic and Serbia) we claim that JIC as a model of organization of AMS contributes to provision of measured data of higher quality judging by the reliability of data, transparency and equal access to all interested parties of the market.

Keywords: advertising, audience measurement, broadcast media.

JEL classification: M37

1. Introduction

TV audience measurement has a long tradition in Europe. Broadcasters and advertisers (as well as their advertising/media buying agencies) have always been interested in capturing viewership of TV programs. Therefore, media audience measurement has been regarded vital for successful operations of both media space/airtime sellers (media outlets) and buyers (advertisers and their agencies). Media audience data collection in various forms has been performed for almost a century, dating back to the 1920-ties with the first readership surveys organized in the US. Soon after, broadcast surveys have been put into operations in the US as well as in Europe (UK), firstly with regard to radio audience measurement (as of the 1930-ties) and since 1949 also with TV audience (Estibals, 2000). Broadcast surveys have been of an utmost importance for owners of broadcast media for both program scheduling and airtime sales. As a specific measure, the term "rating" was coined along the first radio broadcast survey representing the audience of a particular medium/station/program as a percentage of the total audience in a given period of time. Even today this and other calculated measures (particularly

GRP) in developed media markets tend to be used as a "single audience currency" for airtime trading.

At the same time, in academic research, audience measurement systems, also referred to as “market information regimes” (Webster, Ksiazek, 2012), have been drawing attention of international academics for more than half a century (Chappell, Hooper, 1944, according to Napoli, 2008b). Specific issues cover methodological and technical aspects of audience measurement systems (e.g. Buzzard, 2002; Bourdon, Meadel, 2011), rating analysis and media audience behaviour including the impact of media audience fragmentation on measurement systems and the change of trading currency (e.g. Napoli, 2008b; Napoli, 2008a; Webster, Ksiazek, 2012; Taneja, Mamoria, 2012; Napoli, 2012). Authors have also paid attention to the monopolistic nature of media measurement (Taneja, 2013) as well as regulatory and self-regulatory issues deriving from the audience measurement system’s effect on the diversity of content and sources, media ownership and concentration (Napoli, 2008b; Ginosar, 2014). While it has been acknowledged that audience measurement systems have been of equal importance for the programme planners (i.e. media outlets), advertisers (i.e. advertising and media buying agencies) and the socio-political and regulatory decisions affecting overall media pluralism and media freedoms, the glut of academic literature has mainly focused on the usefulness of the measured data for media planning and evaluation of advertising effects as well as for the sale of advertising time (Buzzard, 2002). Against such a backdrop, our paper also focuses on the usefulness of the measured data primarily for the advertisers, aiming to analyse the benefits and drawbacks of three different models of organization of AMS in Europe.

By mutual consent in academic research, the audience measurements system (AMS) is regarded a natural monopoly even when own service (OS) is the sole applied model of its organization, which is the case in the US. Authors also agree that ratings, as the applied currency, typically measure audience exposure and are mainly based on consumer demographics rather than consumer behaviour. Finally, it is also well accepted in literature that the quality of measured data is directly affected by the sampling procedures and panel size rather than applied data collection techniques and measurements. The above listed general conclusions have been derived mostly from the conducted case study analyses, many of which have discussed various methodological approaches and third-party measurement services provided in particular by advertising media markets (e.g. Buzzard, 2002; Bourdon, Meadel, 2011; Taneja, Mamoria, 2012; Taneja, 2013).

However, to the best of our knowledge, the academic analyses of the models of organization of AMS are rather scarce. Raising the question of whether the advertisers know what they have been paying for, this paper aims at closing the recognized gap in academic literature while performing the same research design based upon the case study analysis. Therefore, our specific goal was to analyse the effect of the acquired model of organization of AMS (i.e. Own Service, Media Owned Company and Joint Industry Committee) on the quality of measured data rather than the developed methodology per se. The rationale for it was found in the fact that TV ratings were mostly measured based upon similar methodology (peoplemeters installed in panel households, and performed by one of the three leading media research companies - TAM: AGB Nielsen, TNS: Kantar and GfK Telecontrol). On the other hand, depending on the model of organization of AMS, interested users (i.e. media outlets, agencies and advertisers) may a have higher or lower impact on the sampling procedure and panel size and thus on the overall reliability and transparency of measured data.

2. Model of organization of AMS in Europe

The proliferation of media coupled with a strong audience fragmentation has further underlined the need for objective media audience data stemming from a transparent, unbiased,

verifiable audience measurement system (AMS) and assuring equal access to all users (i.e. media outlets, advertising and media buying agencies and advertisers). General principles related to the audience measurement tend to be universally accepted within the industry on the global level (Global Guidelines of Out-of-home Audience Measurement, 2009). Yet, across Europe and worldwide AMS is organized in accordance with one of the three models presented bellow: 1. Own service (OS) 2. Media owned company (MOC) and Tripartite Research Company Contract (TRCC) 3. Joint industry committee (JIC).

1.1. Own service as model of organization of AMS

This model of organization of AMS is typical for the US, which is particularly due to the Anti-trust law, though, as previously noted, academics have vastly agreed that AMS tends to be a natural monopoly. OS model is also found in measuring TV ratings in a number of European countries such as for example in Bulgaria, Finland, Greece, Poland, Russia, Spain (EMRO Audience Survey Inventory, 2018). Serbia is yet another example of a European country in which this model of measuring TV audience has been applied. In accordance with OS model of AMS organization, the implementation, evaluation and quality control of audience measurements are conducted through privately owned research companies offering their research services on the free market and under equal conditions to all audience data users (media outlets, media buyers and advertisers). Therefore, the research agency runs the survey in accordance with the internally developed methodology and signs individual contrasts with interested users (data purchasers).

As such, this model has some advantages and disadvantages in comparison with the other two - MOC and JIC (explained below). The main advantages are higher speed of transactions and no-needs for a long-term commitment to a single data supplier. On the other hand, there are also disadvantages, mostly related to pricing and overall costs of data purchase but also the quality of data (i.e. its reliability and transparency) which need to be taken into serious consideration. Namely, as AMS tends to be a natural monopoly, high prices may limit the access to audience data for a number of potential users without adequate economic power to purchase it. This is particularly the case for small local media, civil society media, non-profit media, thus remaining at the end of the long media tail (Anderson, 2006, according to Webster, Ksiazek, 2012). Equally the same limitation applies to smaller advertisers and advertising agencies, which may not be in the position to purchase the data and thus base their decisions on available evidence. However, economic inefficiency related to overall costs of data purchase of the OS model is also evident even in a theoretical case when there would be few competing data suppliers (i.e. duopoly competition). The latter may lead to a waste of financial and other resources due to a need for purchasing and analysing various data-sets supplied by individual research companies. Instead of purchasing few data sets it would certainly be more efficient to pay for one bigger data set developed to meet various analytical needs. Moreover, AMS organized though private commercial ventures (OS), though sometimes implying possibilities to exercise influence on the survey design and apply control mechanisms by established industry committees or other independent bodies (Syfret, Ruud, 2014), is typically seen as being of "variable quality" due to weak or even non-existent quality control and lack of transparency in research suppliers operations (WFA/EACA Guide, 2001).

1.2. Media owned company as a model of organization of AMS

This model represents an intermediate between OS and JIC. Under this model AMS is organized by a research company owned by one or more media companies, signing individual contracts with as many clients as possible. Therefore, MOCs organize and run the surveys and own the data sets operating as private commercial ventures. They may sub-contract other media research agencies but only with regard to field work. This means that the development of

methodology and application of control mechanisms are the sole responsibility of these organizations.

In certain cases, shares of media research companies may also be held by advertisers and advertising agencies thus constituting the so called Tripartite Research Company Contracts (TRCCs) (Syfret, Ruud, 2014), and *User sector committees (ESOMAR, 2009)*. For its tripartite nature (representation of media, advertising agencies and advertisers), TRCC structure may seem particularly similar to the one in JIC yet it is important to notice that both MOCs and TRCCs are privately owned profit making companies, whereas JICs are typically non-profit organizations (Estibals, 2000).

Like the previous one, MOC model of organizing AMS also has a few advantages and disadvantages. Better cost structure and the fact that financing is guaranteed and shared among interested parties seem to be among the main advantages of this model. Since the contract has been set for a certain period of time it leaves enough space for market competition thus allowing new research companies to enter the market. On the other hand, slower procedures related to setting up the survey and making further changes and improvements than in the case of OS make for its potential drawbacks. Moreover, the risk of potential exclusion (i.e. discrimination) of non-participating market players (particularly those of smaller size) leading to unfair market competition as well as a relatively small influence of media agencies over technical procedures, reporting, data access and costs are certainly the main disadvantages of this model (The WFA/EACA Guide, 2001).

This model of organization of AMS for TV audience measurement has been applied in several European media markets, such are for example Austria and Norway (EMRO Audience Survey Inventory, 2018). In the case of TV AMS, a hybrid system has also been applied in France, where TAM named *Mediamat* has been run by Mediametrie, a research company owned by different media companies and advertising agencies (Estibals, 2000; Burden, Meadel, 2001). Since the majority of capital is held by broadcast media (35% TV stations, 27% Radio Stations), advertisers and media buyers (35%) (Syfret, Ruud, 2014), Mediametrie may be regarded as an example of a TRCC, selling its services to as many individual clients as possible. However, it is interesting to note that the establishment of Mediametrie has not resulted from industrial negotiations among competing companies as should be generally the case with MOC and JIC models of AMS. On the contraty, Mediametrie was established in the process of privatization of the research department of public broadcaster ORTF in 1985 and therefore the state and public broadcasters still remain among important shareholders of this tripartite company.

1.3. Joint industry committee as a model of organization of AMS

Within the JIC model of organization of AMS, a legally established tripartite body (i.e. a committee represented by all the three interested parties - media companies, advertisers and/or their advertising agencies and media buying agencies) commissions a media research agency to perform media audience research in accordance with set specifications. One possible form assumes that JIC is responsible for specifying the terms of contract and organizes tender to select a media research agency who will become an official provider of measured data on media audience for a specified period of time (typically five to seven years). Accordingly, the survey structure, data collection procedures, reporting and control mechanism are set up and supervised by JIC. The committee owns the data sets and therefore may voluntarily decide upon its distribution (e.g. licensing primary users and charging the access to data among non-members) and dissemination (e.g. providing open access to selected sets of data in broader public interest). Another possible form of JIC assumes that this organization has been established for the purpose of verification of measured data (i.e. data auditing) and issuing certificates rather than survey organization in which case JICs are not owners of the data sets.

Whatever the form, the tripartite structure of the organization and its non-profit orientation remain the main characteristics of JICs. According to WFA/EACA Guide (2001) JICs commissioning media research agencies and thus becoming the owners of the data sets are preferable models of organization of AMS due to many advantages over OS and MOC models (Burden, Meadel, 2001). These mainly stem from the fact that the funding for running the survey is guaranteed and since being jointly collected within the industry the overall budget may be much greater than in the case of individual purchases. Therefore, particularly with regard to TV measurement it may allow more sophisticated measurement systems to be implemented (e.g. bigger panels, higher number of channels, including also those at the end of the long tail). As such, JIC is believed to provide a good value for money for its affiliated members and other users, while it also ensures the reliability of data as well as measurement improvements over time (mainly through its technical committees). It increases the chances for a broad acceptance of measured data which may then become *a joint industry currency* used for trading between the media companies and the advertisers/media buying agencies.

Most of JIC organizations have been established in Europe. They operate across various media classes in many European countries (mainly the members of the EU) including for example: Austria (Print and Online), Belgium (all measured media), the Czech Republic (TV, Print, Radio, Online), Denmark (Print), Finland (Print and Radio), Germany (all measured media), Greece (Radio), Portugal (TV), Romania (TV, Print, OOH, Online and Cross media), Spain (Print, Radio and Cross-media), Switzerland (TV, Print, Radio, Online and Cross media), the Netherlands (TV, Print, Radio, OOH and Cross media), Ukraine (TV and Radio), UK (TV, Print, Radio and OOH). The establishment of JIC has also been initiated within media industries of the Western Balkan countries, including BiH (TV) and North Macedonia (TV). With an exception of the US where this model of AMS organization is non-existent, JICs are globally present organizations as is confirmed by the cases of Morocco (Print and Radio) and Hong Kong (TV) (EMRO Audience Survey Inventory, 2018; Syfret, Ruud, 2014).

2. Case study analyses

As noted above, most of research studies used case study analyses for deriving conclusions related to the functioning of AMS in the U.S., India and Western European countries (e.g. Buzzard, 2002; Bourdon, Meadel, 2011; Taneja, Mamoria, 2012; Taneja, 2013). Thus we follow the similar research design, while analysing advantages of JIC model of organization of AMS in TV audience measurement over the OS model. With such an aim, in accordance with Yin (2009) we followed the developed case study protocol and set the criteria for selecting the cases focusing on the multiple case study design (i.e. two-case studies). The two cases have been selected based on the following criteria: 1) the countries share similar heritage with regard to media and advertising market development, 2) the countries are similar with regard to population size and 3) each country applies different model of organization of AMS (OS vs. JIC). Against such a backdrop, we have selected Serbia as a country that has gone through transition to market economy, with population size of about 7.022 mill (2017) where OS model of organization of AMS has been applied and the Czech Republic, yet another former transition country with the population of 10.58 mill (2017) where JIC model of organization of AMS with regard to TV audience measurement has been functioning for the last 20 years. Our goal was to analyse if JIC model of organization of AMS may positively affect the quality of measured data, if judged based upon transparency, reliability and equal access for all interested parties. The data collection technique was mainly based on secondary sources (mainly web-sites, press releases and published reports) yet a few personal interviews with relevant stakeholders in Serbia and the Czech republics were conducted as well.

2.1. Case study Serbia

The development of media and advertising industries in Serbia has accelerated substantially over the last two decades. The proliferation of commercial media along with the establishment of advertising agencies as well as the entrance of big international advertisers and their advertising agencies on the Serbian market fuelled further growth of advertising revenues, reaching 176 million EUR in 2017 (Nielsen, 2017, according to *Prava mera medija*, 2018).

Media measurement in Serbia has a long tradition, dating back to the 1920-ties when the first Radio audience survey was organized. Radio and TV audience measurements aligned with internationally recognized methodology started as of 1936 and 1952 respectively. According to Mr. Prvoslav Plavšić, public opinion and media audience researcher and general manager of the *RTV Centre for the research of public opinion*, *program and audience,* the AMS was set up in accordance with the highest international standards owing to the expert support received from the most influential international broadcasters like BBC and RAI. The Centre used various methodologies but the most reliable one proved to be *Day after recall* organized through face-to-face interviews with 1,200 respondents in a representative sample. The measured data were mainly used for program scheduling but also for commercial operations related to airtime sales. Marketing departments responsible for what was called EPP (advertising blocks inserted in TV program scheme) used the measured data to set advertising prices and provide viewership data to their clients. Since the end of nineties, over the period of transition to market economy the audience measurement methodology continued to develop as new marketing research agencies started to provide their services and big international advertisers entering the market. Strategic Marketing & Media Research Institute (SMMRI) offered radio, TV and print measurement in line with widely accepted international methodologies. First TV measurements used diaries, while people-meters were introduced by AGB Strategic Research by the beginning of 2000. Soon after, an international TV audience measurement company TNS Nielsen entered the market, bringing a new methodology.

While in 2003, there was an initiative to establish a TV JIC which failed to succeed, OS is the currently applied model of organization of AMS in TV measurement. The industry has unofficially accepted ratings provided by the only operating research company on the market (AGB Arianna, by AGB Nielsen) as the trading currency, while many smaller broadcast and cable TV providers still use seconds for these purposes.

Due to a relatively small panel size (i.e. 830 peoplemeters, based on the sample of 2429 individuals out of 6,8 million TV watching population), as well as the lack of funds, many TV channels have not been reported on regular basis and are therefore remaining excluded from media plans created by big advertising agencies and media buyers. In addition to this fact, the quality of measured data should also be questioned as there is no official verification of the installed peoplemetres and applied methodology nor has any legal obligation to publically announce measured data been applied. Hence, in accordance with the applied model of organization of AMS in Serbia transparency, reliability and equal access to data for all interested parties are limited, thus hindering their possibilities to make evidence based strategic decisions with regard to their business relations on the advertising market (i.e. trading advertising ratings as well as developing proper media plans while serving clients).

2.2. Case study the Czech Republic

Though currently an EU member state, the Czech Republic has been regarded comparable with Serbia due to its similar economic heritage resulting from the pre-transition period as well as the fact that it has undergone a transition process toward a market economy starting at the beginning of nineties. In that regard, in the sphere of media industry, the most

radical changes included the privatization of media and market liberalization, followed by the intensive growth of the advertising industry. Nowadays, according to the size of the consumer-side of the media market as measured by the size of population, the Czech Republic (overall population size around 10.6 million) is slightly bigger than Serbian (population of about 7 million). Yet, taking into consideration the advertisers-side of the market measured by the overall advertising spending, the Czech media market is about five times bigger than Serbian, reaching around 1 billion Eur advertising revenues in 2017 (Zenithmedia, 2017).

The Czech Republic was the first among the CEE countries to establish TV AMS organized through JIC (ATO) while TV audience measurement was practiced also in the earlier decades (e.g. the use of diaries in TV viewing measurement in the Czech Republic (or Czechoslovakia) dates back to the 1970s). According to Ms Vlasta Roškotova, ATO managing director, *the main reason for establishing ATO was necessity to get more precise TAM (Television Audience Measurement) data and a strong desire for having one common and official (single) TV currency.* Owing to a wide consensus among the big media players across the entire media market, the ATO project of TV audience measurement which started in June 1997 was carried out electronically in 660 households by Taylor Nelson Sofres Media based on the contract signed with the main users associated with the ATO (Czech Television, TV Nova and TV Prima). Initially, only four stations were measured, but over time the project grew in scope both in terms of the number of households covered and TV channels measures. Currently 1,899 households have been included in the panel, based on the sample of 4417 individuals and 9.8 mill TV population. As many as 100 TV channels have been measured and 53 reported by Nielsen Admosphere as the research agency contracted by ATO. Functioning as JIC, ATOs mission is to protect and implement the common interests of its members and organize an electronic television measurement commissioning and implementing research agency. ATO is the owner of measured TV data and therefore the only responsible body for its commercial use, publishing, certification, media analyses and negotiation of technical standardizing, legislative and related measures in the field of broadcasting operations. As of 2010 ATO has also been awarded a status of self-regulator from the Council for Radio and TV broadcasting (the main media regulation authority in the Czech Republic).

Unlike in the case of Serbia, measured data on TV audience are published regularly on ATO web site allowing public access and thus guaranteeing transparency. Data reliability is also supported through continual verification (i.e. auditing) and constant improvements of the applied methodology and the increase of sample and panel sizes. On the other hand, equal access for all interested parties stays hindered to a certain extent due to the lack of financial resources of smaller media outlets, yet the bigger size of the panel allows more channels to be reported than is the case in Serbia.

3. Conclusions and managerial implications

Raising the question of whether the advertisers know what they have been paying for, this paper explores different models of organization of AMS (Audience Measurement System), present in European countries, as these highly affect the quality of measured data, when judged based on their transparency, reliability and equal access for all interested parties. The issue of models of organization of AMS has not been widely examined in the academic literature, compared to methodological and technical aspects. On the other hand, organizational aspects of audience measurement can have significant impact on the quality of the whole AMS, which affects business decisions of various players on the media market, with additional socio-political implications. Therefore, the specific goal of the study was to analyse the effect of the acquired model of organization of AMS on the quality of measured data rather than the developed methodology per se. The three organizational models are identified as mainly

applied in different countries in Europe: Own Service (OS), Media Owned Company (MOC) and Joint Industry Committee (JIC), and evaluated in terms of their main advantages and disadvantages with regard to the quality of data provided. Although the academic analyses of the models of organization of AMS are rather scarce, there is evidence of ascendancy of JIC model, which exhibits several advantages over the others: joint funding, which allows greater budget for the research and implementation of more sophisticated measurement systems, increased reliability of data due to the established audit mechanism, good value for money for affiliated members, regular improvement of methodology, as there is a technical committee operating as a group of experts. As JICs are established by the representatives of main industry players and professional associations, they often succeed in authorizing a joint industry currency, as a widely accepted audience measure on a national level. For deeper understanding of the effects of different organisational models, the multiple case study protocol was applied in the study. Examining the OS model implemented in Serbia, and JIC model in Czech Republic, for TV audience measurement, additional insights into the specifics of the models were provided. Based on around 20 years of the OS or JIC models of AMS practice, in two European countries, with similar socialist and transitional backgrounds, the study confirmed the identified advantages of JIC models, and revealed some others. Although the methodologies are similar, there are differences regarding the sample and panel size, which are larger in the case of JIC model in Czech Republic, providing better reliability of data, additionally increased by audit mechanism developed and implemented by the JIC. Audience data were transparent in the case of JIC model, available on the website of organizations. Due to joint funding, ATO – JIC manages to include a larger number of different media, even the smaller ones, into the sample, providing more relevant data for different industry players, which is one of the main problems of OS model. The case study analysis supported our assumption that JIC model of organization of AMS positively affects the quality of measured data, if judged based upon transparency, reliability and equal access for all interested parties.

As the academic analyses of models of organization of AMS are rather scarce, especially in the East and South-East Europe, the study provides a valuable contribution to understanding the main effects of different organizational models of AMS on the quality of data. Since the quality of data is evaluated primarily from the standpoint of advertisers, the main implications of the study can be proposed from the same perspective. JIC model has a high positive influence on data transparency, reliability and equal access providing advertisers and their professional organizations possibilities to rely on JIC model of organization of AMS. In the absence of such an organization, they should therefore encourage its establishment and proactively initiate it, with other relevant interested parties. Apart from the implications on the side of advertisers and their agencies, the organization of AMS is a relevant issue for regulatory bodies, due to various social and political implications of audience measurement. JIC model of organization of AMS can increase media pluralism, by enhancing the market position of small, local media which are often excluded from the measurement in other organizational models.

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